

Remarks

The present Amendment is submitted in response to the Office Action dated June 23, 2010.

The Office Action rejects claims 1, 4, 6, 9 and 10 under 35 USC §102(b) over Altfather, rejects claim 3 under 35 USC §103(a) over Altfather, rejects claim 8 under 35 USC §103(a) over Altfather in view of Maeda, rejects claim 1 under §103(a) over Wieser in view of Altfather and rejects claims 11 and 12 under §103(a) over Wieser in view of Altfather further in view of Tomooka.

§102(b)

To support the rejection under §102(b), the Examiner asserts that Altfather discloses an intrusion detector including a sensor arrangement for detecting a liquid (C) applied on a surface to render the intrusion detector inoperable, that Altfather's sensor arrangement includes a transparent elevation 21 with a first facet 21A and a second elevation 22 with a second facet 22A to enhance capillarity effects of a liquid (ink) applied on the surface.

The Examiner further asserts that Altfather's light source 34 is arranged for emitting an incident ray (r) to pass through the surface into one of the transparent elevation 21 and the second elevation 22 such that in a presence of the liquid (C) at one of the first facet 21A and the second facet 22A, the incident ray is transmitted through the first facet 21A or the second facet 22A, etc., and a

light detector for detecting the reflected incident ray at one of the first facet 21A and the second facet 22A.

Applicant respectfully disagrees. However, in order to further prosecution, applicant has amended claim 1 to better distinguish Altfather (and Wieser).

Claim 1 is amended in pertinent part to make clear that the intrusion detector includes a sensor arrangement for detecting a liquid (C) applied on an exposed surface to render the intrusion detector inoperable, that the at least one transparent elevation is formed on the exposed surface, that the at least one first facet of the transparent elevation defines a first angle with the exposed surface, that a total reflection occurs at an interface of the first transparent material (B) and the liquid (C) applied on the exposed surface to render the intrusion detector inoperable, that the second facet of the at least one second elevation defines a second angle with the exposed surface to enhance capillarity effects of the liquid (C) applied on the exposed surface to render the intrusion detector inoperable and that the light detector is for detecting the reflected incident ray (r') at one of the first facet and the second facet and recognizing that the liquid (C) is applied to the exposed surface to render the intrusion detector inoperable (tying the body of the claim to the limitation in the preamble).

Altfather is not an intrusion detector including a sensor arrangement for detecting a liquid applied on an exposed surface to render the intrusion detector inoperable, as claimed.

Altfather's second elevation 22 with second facet 22A is not used for detecting ink *per se*, but for detecting a presence of an ink container 16.

Altfather's second elevation 22 with second facet 22A is not used for detecting a liquid applied on an exposed surface to render the intrusion detector inoperable, as claimed.

Altfather's second elevation 22 is not used in cooperation with the transparent elevation 21 and its respective first facet 21A to enhance capillary effects of the liquid (C) applied on an exposed surface to render the detector inoperable, as claimed.

Altfather is not configured with a light detector for detecting the reflected incident ray at one of the first facet 21A and the second facet 21B to recognize that the liquid (C) is applied to the exposed surface to render the intrusion detector inoperable.

Accordingly, claim 1 and claims 4, 6, 9 and 10 that depend from claim 1 are patentable under §102(b) over Altfather, and applicant respectfully requests withdrawal of the rejections thereunder.

§103(a)

In response to the rejection of claim 3 under §103(a) over Altfather, applicant respectfully asserts that it would not have been obvious to modify claim 1 to include the feature that the elevation has a tetrahedron-shape and three first facets at least for the reasons set forth above for the patentability of amended

independent claim 1, from which claim 3 depends. Applicant respectfully requests withdrawal of the rejection, therefore.

In response to the rejection of claim 8 under §103(a) over Altfather in view of Maeda, applicant respectfully asserts that Maeda suffers the same shortcomings of Altfather as described above. It follows that claim 8 is patentable over Altfather in view of Maeda for at least the reasons set forth above for the patentability of claim 1, from which claim 8 depends, and applicant respectfully requests withdrawal of the rejection, therefore.

To support the rejection of claim 1 over Wieser in view of Altfather, the Examiner asserts that Wieser discloses a sensor arrangement for detecting a liquid (C) applied on a surface 3 with at least one transparent elevation 4 formed on the surface 3, wherein at least one first facet of the transparent elevation 4 defines a first angle with the surface 4, a light source 8 arranged for emitting an incident ray (r) into a first direction such that the incident ray passes through the surface 3 into the transparent elevation 4 such that in a presence of the liquid (C) the incident light is transmitted through the first facet and a light detector 8 for detecting the reflected incident ray at the first facet.

The Examiner then asserts that Wieser fails to teach the angle limitations, a second elevation and second facet defining an angle with the surface larger than 75 ° such that capillary effects are enhanced, that the light source emits light into either the first or second elevation, etc., that Altfather includes all of these features and that it would have been obvious to modify Wieser by the teachings

of Altfather to realize an effective and reliable method to determine if liquid is present to increase accuracy and capability of the device.

Applicant respectfully disagrees. Wieser discloses a passive infrared intrusion detector 1 whose housing 2 has an entrance window (surface) 3 with an exposed side comprising a diffraction grating structure 4. Wieser's diffraction grating structure 4 consists of fine grooves that form phase-modulating relief structure, e.g., an elliptical grating structure. The grating structure comprises the same material as the entrance window 3. The grating structure is for focusing radiation from a light source, as distinguished from infrared radiation from a space being monitored.

Wieser's diffraction grating structure 4 is not a transparent elevation formed on a surface 3 and made of a first transparent material, as claimed.

Wieser's diffraction grating structure 4 does not include a first facet defining a first angle with respect to the surface, as claimed. That is, there is no elevation or facet taught by Wieser, still less an "angle" made by grating structure 4 with surface 3. In the presence of sabotaging spray, the Wieser grating structure 4 is disfigured, which scatters light diffusely such that light detected at sensor 9 decreases. If the amount of detected light falls below a threshold, a sabotage signal is generated.

Hence, even assuming, arguendo, that Altfather teaches the limitations asserted by the Examiner in support of the rejection, the proposed modification of

Wieser still would not realize the invention of claim 1, particularly in view of the instant amendments hereby.

For that matter, Wieser is not intended to operate such that an incident ray transmitted from a light source into the first facet of a first elevation passes through the first facet in the presence of the liquid, and is reflected due to a total reflection at the first facet in an absence of the liquid such that a light source can determine whether a liquid has been applied to render the intrusion detector inoperable. Again, Wieser detects sabotage where the amount of light becomes limited in accordance with the diffraction grating structure, and not by modification to an angle at which total reflect might or might not occur in view of the presence or absence of an applied liquid.


While modifying Wieser by adding the features of Altfather might be possible, it would be like adding features of an orange to an apple. That is, because Wieser is not constructed to operate as is Altfather, modifying Weiser by the teachings of Altfather as proposed in the Office Action would render the Wieser unsatisfactory for its intended purpose (see In re Gordon, 221 USPQ 1125 (Fed. Cir. 1984)), and/or at least change Wieser's respective principles of operation (see In re Ratti, 123 USPQ 349 (CCPA 1959)), which in either case compels a legal conclusion that the proposed combination cannot be obvious under the law; MPEP 2143.01.

Hence, amended independent claim 1 is patentable under 35 USC §103(a) over Wieser in view of Altfather, and applicant respectfully requests withdrawal of the rejection thereunder.

In response to the rejection of claims 11 and 12 under 35 USC §103(a) over Wieser in view of Altfather further in view of Tomooka, applicant respectfully asserts that Tomooka fails to overcome the shortcomings of Wieser modified by Altfather. Claims 11 and 12 are therefore patentable over Wieser and Altfather further modified by the teachings of Tomooka for at least the reasons asserted above in response to the §103(a) rejection of claim 1 over Wieser in view of Altfather, and applicant respectfully request withdrawal of the rejections, therefore.

Accordingly, the application as amended is believed to be in condition for allowance. Action to this end is courteously solicited. However, should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application in condition for allowance.

Respectfully submitted,



Michael J. Striker
Attorney for Applicant
Reg. No. 27,233
103 East Neck Road
Huntington, New York 11743
631 549 4700